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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,127	06/01/2001	Brian E. Lemoff	AT10004209-1	3243

7590 06/26/2003
AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

PAK, SUNG H

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/873,127

Applicant(s)

LEMOFF ET AL.

Examiner

Sung H. Pak

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,8,11,12,16-18,20 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8,11,12,16-18,20 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicants' amendment filed 4/28/2003 has been entered, and the pending claims have been carefully reconsidered by the examiner. Claims 1-2, 4-5, 8, 11-12, 16-18, 20, 26-28 are now pending. However, the claims are still deemed unpatentable. In view of the amended limitations, the prior ground of rejection has been withdrawn and a new ground of rejection is provided in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 4-5, 8, 11-12, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (JP 06-258584) in view of Mock (US 5,664,034).

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Kobayashi et al and Mock references were cited in the prior office action.

Kobayashi et al reference discloses a fiber optic matrix switch with all the limitations set forth in the claims, except it does not teach the use of collimating lens.

Specifically, Kobayashi et al teach: N input and M output optical fibers (Fig. 1); a first plurality of stages each supporting an end portion of a corresponding one of the N optical fibers in ferrules; a second plurality of stages each supporting an end portion of a corresponding one of the M optical fibers in ferrules (Fig. 1); means for translating the stages along a plurality of overlapping paths to align a facet of a selected one of the N input optical fibers with a facet of a selected one of the M output optical fibers (abstract); wherein fibers are translated orthogonal X and Y axis (Fig. 1); wherein $N=M$ (Fig. 4) re Claims 4, 16; means for moving the end portions of at least some of the optical fibers along a plurality of Z axes perpendicular to the X and Y axes to mate and un-mate the facets of the input and output fibers (See "17" in Fig. 1); a connecting plate having plurality of holes and connecting sleeves (Fig. 1 and abstract); means for controlling and fine-tuning the movement of the actuator for positioning the fiber ferrule (paragraph 0026-0029).

The use of collimating lens between input and output fibers is commonly known in the fiber switching art as shown by Mock. Regarding Claims 1, 11 and especially Claims 5, Mock teaches a fiber optic movable switching device having collimating lens disposed at the fiber termination point (column 5 lines 45-57). Mock teaches that the use of collimating lens is advantageous because it improves optical coupling between the input and output fibers. Therefore, it would have been obvious to a person of

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ordinary skill in the art at the time the invention was made to modify Kobayashi et al device to have collimating lens between input and output fibers.

Claims 20, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (JP 06-258584) in view of Takahashi (US 6,307,982).

Kobayashi et al and Takahashi references were cited in the prior office action.

Kobayashi et al reference discloses a fiber optic matrix switch with all the limitations set forth in the claims as discussed above, except it does not teach the means for moving fiber ferrules relative to switching stages along Z-axes.

Takahashi, on the other hand, teaches a fiber optic switch with a ferrule mating mechanism that moves fiber ferrules relative to a switching stage (Figs. 1 and 2). Takahashi teaches that such a feature is advantageous over the prior art because it allows for an input fiber to be moved to an arbitrary position and be coupled with a desired output fiber (column 3 lines 6-13). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kobayashi et al device to have a mechanism that moves fiber ferrules relative to the switching stage.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

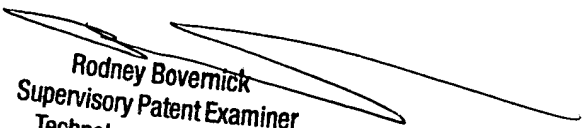
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June 18, 2003

Sung H. Pak
Examiner
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